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### (54) Motion sensor for implantable medical device

(57) A sensor (200) and related method for multi-axial measurement of motion for an implantable medical device. The sensor (200) has a wide variety of applications, including use as a cardiac wall motion sensor or a physical activity sensor. The sensor (200) includes first and second conductors (208,210) over which the motion measurements are made. A first transducer (202) provides a first motion measurement indicative of sensor acceleration during a first phase, while a second trans-

ducer (204) provides a second motion measurement indicative of sensor acceleration during a second phase. The first and second transducers (202,204) are connected in parallel so as to provide the first and second motion measurements to an implantable medical device over the first and second conductors (208,210). The first and second phases are non-overlapping periods of time so that the motion measurements from each transducer are time division multiplexed.

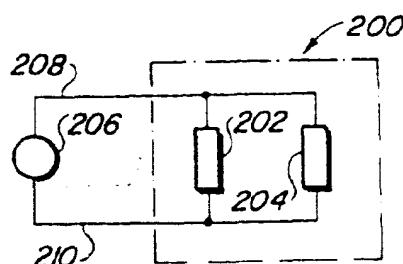


FIG. 2



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## EUROPEAN SEARCH REPORT

Application Number

EP 96 30 1065

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	DE 39 39 898 A (BIOTRONIK) 6 June 1991 * column 2, line 15 - line 35 * -----	1	A61N1/365
TECHNICAL FIELDS SEARCHED (Int.Cl.6)			
A61N G01P			
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search		Examiner
THE HAGUE	4 September 1998		Taccoen, J-F
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			